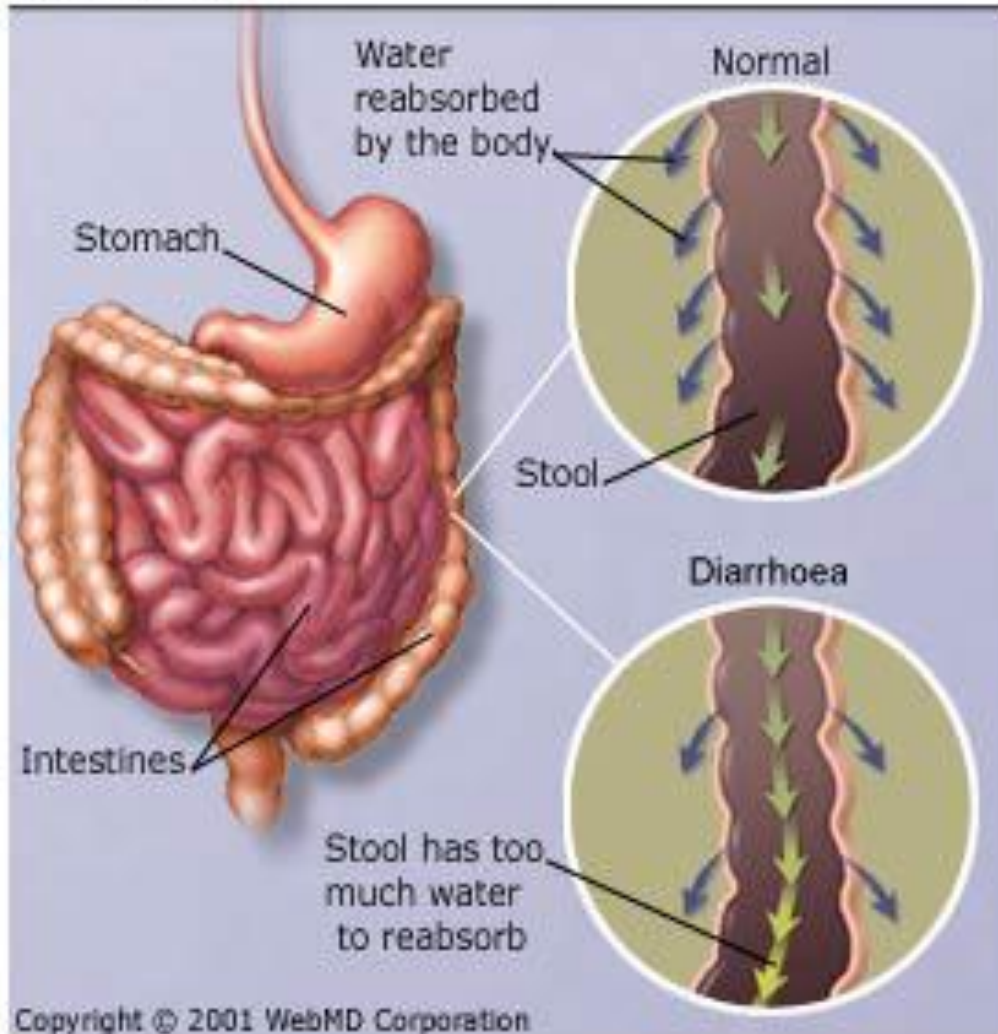


# Diarrhoea and Cholera

Compiled by: Archana Matela

# Diarrhoea

## Diarrhoea



It is the loss of watery faeces at an increased frequency.  
It occurs when fluid cannot be absorbed from the contents of your bowel, or when extra fluid is secreted into your bowel.

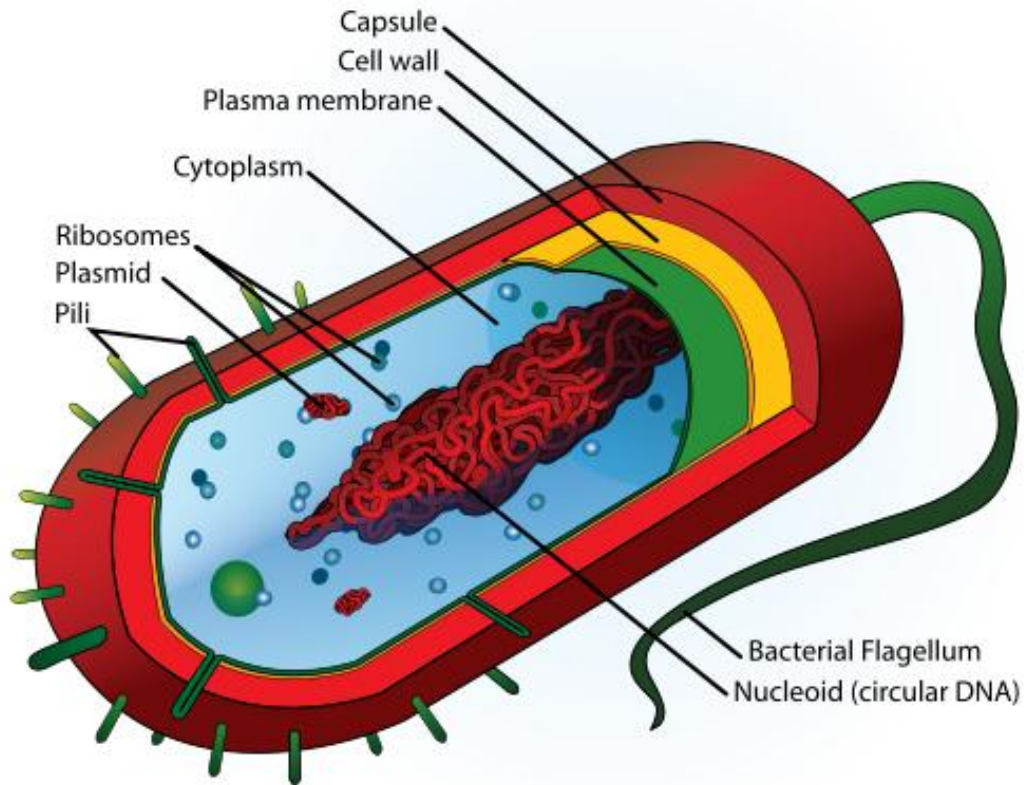
# Causes of Diarrhoea

- a virus
- bacteria, such as Escherichia coli (E. coli), salmonella – these may all cause food poisoning
- parasites
- Diarrhoea caused by contaminated food or water while visiting a foreign country is often known as travellers' diarrhoea.
- Other possible causes of short-term diarrhoea include:
  - drinking too much coffee or alcohol
  - a food allergy
- It can also sometimes be a side effect of medicines, including:
  - antibiotics
  - antacid medicines, statins
  - laxatives

# Treatment of Diarrhoea

- It involves avoiding dehydration and replacing lost fluid.
- **Oral rehydration therapy (ORT)** is a type of fluid replacement used as a treatment for dehydration.
- It is dissolved in water and replaces sodium chloride, potassium and glucose lost from our body. The amount they should drink will depend on their size and weight.
- The optimal fluid is plain, clean water. However, fluids such as rice water, coconut water, vegetable broth, yogurt, unsweetened fresh fruit juice or even non potable water are recommended when plain, clean water is unavailable.
- ORT may lower the mortality rate of diarrhea by as much as 93%.

# Cholera



- It is a bacterial infection of the small intestine that can cause severe diarrhoea and dehydration and can also lead to death.
- *Vibrio cholerae*, the bacterium that causes cholera, is usually found in food or water contaminated by feces from a person with the infection.

# Common sources of infection include:

1. Municipal water supplies
2. Ice made from municipal water
3. Foods and drinks sold by street vendors
4. Vegetables grown with water containing human wastes
5. Raw or undercooked fish and seafood caught in waters polluted with sewage

# *Vibrio cholera*

- *Vibrio cholera* releases a toxin which acts on the mucosal epithelium lining of the small intestine and alters their permeability by creating more pores in the cell membranes.
- This causes the secretion of chloride ions (Cl<sup>-</sup>) into the lumen of the small intestines.
- As ions flow into the intestinal lumen, an osmotic gradient is created.
- Body fluids (mostly water) flow out of the body due to osmosis. This leads to massive diarrhea.
- Up to 20 liters (or 20 percent of body weight) of water can be lost in an adult, resulting in massive dehydration. This radical dehydration can bring death within a day through collapse of the circulatory system.